Amendments to the Claims:

1-58. (Cancelled)

59. (New) A method for treating a patient having a tumor comprising:

administering to the patient a DNA methylation inhibitor at a dose below 50 mg/m^2 per day.

60. (New) The method of claim 59 wherein the DNA methylation inhibitor is a cytidine analog.

61. (New) The method of claim 59 wherein the DNA methylation inhibitor is decitabine.

62. (New) The method of claim 59 wherein the DNA methylation inhibitor is administered intravenously or subcutaneously.

63. (New) The method of claim 59 wherein the DNA methylation inhibitor is decitabine and is administered subcutaneously.

64. (New) The method of claim 61 wherein decitabine is administered at a dose ranging from 2-50 mg/m^2 per day.

65. (New) The method of claim 61 wherein decitabine is administered at a dose ranging from 5-20 mg/m^2 per day.

66. (New) The method of claim 59 wherein the DNA methylation inhibitor is administered in a slow release dosage form.

67. (New) The method of claim 59 further comprising:

administering to the patient a therapeutically effective amount of an alkylating agent whose activity as the alkylating agent in vivo is adversely affected by aberrant DNA methylation.

68. (New) The method of claim 67 wherein the DNA methylation inhibitor is administered prior to the administration of the alkylating agent.

69. (New) The method of claim 67 wherein the alkylating agent selected from the group consisting of bischloroethylamines, aziridines, alkyl alkone sulfonates, nitrosoureas, nonclassic alkylating agents and platinum compounds.

70. (New) The method of claim 69 wherein the nonclassic alkylating agent is selected from the group consisting of altretamin, dacarbazine and procarbazine.

71. (New) The method of claim 70 wherein the nonclassic alkylating agent is dacarbazine.

72. (New) The method of claim 67 wherein the DNA methylation inhibitor is decitabine and the alkylating agent is dacarbazine.

73. (New) The method of claim 59 wherein the tumor is a benign tumor.

74. (New) The method of claim 73 wherein the benign tumor is selected from the group consisting of hemangiomas, hepatocellular adenoma, cavernous haemangioma, focal nodular hyperplasia, acoustic neuromas, neurofibroma, bile duct adenoma, bile duct cystanoma, fibroma, lipomas, leiomyomas, mesotheliomas, teratomas, myxomas, nodular regenerative hyperplasia, trachomas and pyogenic granulomas.

75. (New) The method of claim 59 wherein the tumor is a malignant tumor.

76. (New) The method of claim 75 wherein the malignant tumor is selected from the group consisting of breast cancer, skin cancer, bone cancer, prostate cancer, liver cancer, lung cancer, brain cancer, cancer of the larynx, gallbladder, pancreas, rectum, parathyroid, thyroid, adrenal, neural tissue, head and neck, colon, stomach, bronchi, kidneys, basal cell carcinoma, squamous cell carcinoma of both ulcerating and papillary type, metastatic skin carcinoma, osteo sarcoma, Ewing's sarcoma, veticulum cell sarcoma, myeloma, giant cell tumor, small-cell lung tumor, gallstones, islet cell tumor, primary brain tumor, acute and chronic lymphocytic and granulocytic tumors, hairy-cell tumor, adenoma, hyperplasia, medullary carcinoma, pheochromocytoma,

mucosal neuronms, intestinal ganglloneuromas, hyperplastic corneal nerve tumor, marfanoid habitus tumor, Wilm's tumor, seminoma, ovarian tumor, leiomyomater tumor, cervical dysplasia and in situ carcinoma, neuroblastoma, retinoblastoma, soft tissue sarcoma, malignant carcinoid, topical skin lesion, mycosis fungoide, rhabdomyosarcoma, Kaposi's sarcoma, osteogenic and other sarcoma, malignant hypercalcemia, renal cell tumor, polycythermia vera, adenocarcinoma, glioblastoma multiforma, malignant melanomas, and epidermoid carcinomas.